

COMPLETE SAMPLE DELIVERY GROUP FILE (CSF) EVIDENCE AUDIT CHECKLIST (EAC)



U.S. Environmental Protection Agency Region 8 Superfund Program Contract Laboratory Program (CLP)

	Validation (!	-
Case Number: 37 400 SDG Numb	per: <u>M</u> 142697		
AUDIT CHECKLIST		:	,
Note: The following items are verified for each Region 8 CSF, except those indicated the Region 8 Inspection of Complete Sample Delivery Group SOP, the items ic completed on approximately 10% of the Region 8 CSFs. When items identified "N/A" is marked.	dentified as "Complete Audi	it Only" are	
CHAIN OF CUSTODY		•	
Custody Seal Present?	Yes_X	No	
2. Condition of Seal? Intact X Signed X	_ Broken U	nsigned	<u>.</u>
3. Chain of Custody Record(s)/Traffic Reports Present?	, Yes_×	No	
4. Chain of Custody Record(s)/Traffic Reports Signed?	Yes_X	No	
5. Chain of Custody Record(s)/Traffic Reports Dated?	Yes_X	No	
6. Airbill Present?	Yes	No <u>×</u>	
7. Airbill Number(s)?		·	
8. Airbill Signed?	Yes_nc.	No	
9. Airbill Dated?	Yes <u>~na</u>	No	
10. Sample Tags Present?	Yes	No_X	
11. Sample Tags Match DC-1 (Complete Audit Only)?	Yes	No	N/A_X
FORM DC-1		i .	•.
12. Form DC-1 Present?	Yes_X	No	
FORM DC-2			
13. Form DC-2 Present?	Yes_X	No	
14. Form DC-2 Reviewed by USEPA and Correct (Complete Audit Onli	ly)? Yes	No	N/A <u>×</u>

D	OCUMENT CONTROL			
15.	Laboratory Documents Legible (Complete Audit Only)?	Yes	No	N/A
16.	Original Documents Included in CSF (Complete Audit Only)?	Yes	No	N/A_>
<u>D</u>	ATA INSPECTION			
17.	Raw data present (for each analytical fraction defined by the traffic report/chain of custody record)?	Yes_X	No	
18.	Percent Solids Form present for soil samples?	Yes	No	N/A:X
19.	Cover Page Present?	Yes_X	No	
20.	Records of Communication Present?	YesX	No	N/A
21.	Form 1s present (for each analytical fraction defined by the traffic report/chain of custody record/cover page) (Complete Audit Only)?	Yes	No	N/A
E	LECTRONIC DATA	:		
22.	Electronic DAT file elements received? EDD CCS Report M/VS Report Defect Code Report	Yes_X Yes_X Yes_X Yes_X	No No No	N/A N/A N/A N/A
23.	List RPM and contractors who received electronic DAT file:	. 1		
	Tetra Tach	<u> </u>		
<u>C</u>	OMMENTS: Airbill(s) was not provided since the hand delivered to the laboratory	sample	<u> </u>	
. '			,	 -
			·	
				·
		:		
(As de Regior Compl	ed By: fined in the 8 Inspection of ete Sample ry Group SOP) Dow Coodisch Print Name	Date:	9/11/08	5

Page 2 of 2



SDG Administrative Narrative

Contract: $\underline{\underline{FV-W}}$	100-059
Case: 3740	12
SDG: MH20	<u>97-</u>
Set ID No.: 81710	<u> </u>
Cooler # and temperatures of ea	ch (upon receipt)
Cooler Number C08-	Arrival temperature was°C
Cooler Number C08-	Arrival temperature was°C
Cooler Number C08	Arrival temperature was°C
Cooler Number C08-	Arrival temperature was°C
Cooler Number C08	Arrival temperature was°C
Cooler Number C08-	Arrival temperature was°C
Cooler Number C08	Arrival temperature was°C
Cooler Number C08	Aprival temperature was°C
Cooler Number C08	Arrival temperature was°C

Communications:

Any sample receiving issues with this SDG are fully documented through the email communications which are included as a portion of this SDG Narrative and immediately follow this page. Copies of each of these email communications are also located in the communication section of this datapackage. In addition, any analytical issues pertinent to a given fraction are fully documented by the analyst in the associated narrative for the applicable fraction.

Comments:

None.		•	
Signature:	Warates	Date: 7/14/08	

Edwards, Meredith D.

From:

Olson, Roxanne

Sent:

Wednesday, June 18, 2008 2:47 PM

To:

Edwards, Meredith D.

Subject:

FW: Region 08 |Case 37402 | Lab DATAC | Issue Multiple | FINAL

Attachments:

2008061810320025.pdf; 37402 CLP IDs.xls





200806181032002537402 CLP IDs.xls .pdf (642 KB) (28 KB)

----Original Message----

From: Kramer, Caroline [mailto:ckramer5@fedcsc.com]

Sent: Wednesday, June 18, 2008 2:24 PM

To: Olson, Roxanne

Cc: beard.carol@epa.gov

Subject: Region 08 | Case 37402 | Lab DATAC | Issue Multiple | FINAL

Roxy,

Summary Start

-Discrepancies with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC. with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC.
Resolution 1: Per Region 8, the laboratory will note issue in the SDG Narrative and will use the CLP sample ID provided in the attached table for the DM water and soil samples. The TM water samples will retain the CLP ID listed on the TR/COC.

-Sample listed on TR/COC but not received at laboratory- Issue 2: No sample container was received for DM for sample on TR designated MH25A4. TM container was received. Resolution 2: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

Summary End

Caroline L. Kramer ckramer5@fedcsc.com Computer Sciences Corporation (CSC) 703.818.4248

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----Original Message----

From: Beard.Carol@epamail.epa.gov [mailto:Beard.Carol@epamail.epa.gov]

Sent: Wednesday, June 18, 2008 1:17 PM

To: Kramer, Caroline

Subject: Re: Region 08 | Case 37402 | Lab DATAC | Issue Multiple

Caroline-

Issue 1: Please provide the laboratory with new ID for the different matrices for Case 37402.

Issue 2: Please have the laboratory note this in the case narrative and proceed with the analysis.

Thanks! Carol

"Kramer, Caroline"

<ckramer5@fedcsc</pre>

.com>

Carol Beard/EPR/R8/USEPA/US@EPA

CC

06/18/2008 11:06

MΑ

Subject

Region 08 | Case 37402 | Lab DATAC

| Issue Multiple

Carol,

DATAC is reporting the follow issues regarding Case 37402 for samples delivered today. TR/COC are attached for reference. Please advise on how the Region wishes the laboratory to proceed.

-Discrepancies with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC.

*Please advise if you would like me to provide new ID for the different matrices. I can do this in a table like last time.

-Sample listed on TR/COC but not received at laboratory- Issue 2: No sample container was received for DM for sample on TR designated MH25A4.

TM container was received.

Please let me know if you have any questions. Thanks,

Caroline L. Kramer ckramer5@fedcsc.com Computer Sciences Corporation (CSC) 703.818.4248

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----Original Message----

From: Olson, Roxanne [mailto:olsonr@datachem.com]

Sent: Wednesday, June 18, 2008 12:40 PM

To: Kramer, Caroline Cc: Edwards, Meredith D.

Subject: Case 37402 Sample Delivery 6/18

Caroline: Here are the TRs for case 37402 for samples we received today and which we spoke about a few minutes ago on the phone.

Issues we see immediately:

TM, DM and Sediment samples all have same EPA IDs. Water containers labels do

differentiate between DM and TM. No container was received for DM for sample on TR designated MH25A4. TM container was received. How do we complete DC-1 forms?

More issues may crop up but we can't begin to address this delivery until we get the first issues taken care of.

Thanks for your help!

Roxy (See attached file: 2008061810320025.pdf)

Listed TR ID	Matrix	Analysis	New CLP ID	
	water	TM	MH2599	
MH2599	water (filterd)	DM	MH2662	
	soil	TM	MH2663	
	water	TM	MH25A0	
MH25A0	water (filterd)	DM	MH2664	
	soil	TM	MH2665	
	water	TM	MH25A1	
MH25A1	water (filterd)	DM	MH2666	
	soil	TM	MH2667	
	water	TM	MH25A2	
MH25A2	water (filterd)	DM	MH2668	
	soil	TM	MH2669	
	water	TM	MH25A3	
MH25A3	water (filterd)	DM	MH2670	
	soil	TM	MH2671	
NAUSEAG	water	TM	MH25A6	
MH25A6	water (filterd)	DM	MH2672	
	water	TM	MH25A7	
MH25A7	water (filterd)	DM	MH2673	
ī	soil	TM	MH2674	
	water	TM	MH25A9	
MH25A9	water (filterd)	DM	MH2675	
	soil	ТМ	MH2676	
ļ	water	TM	MH25B0	
MH25B0	water (filterd)	DM	MH2677	
	soil	TM	MH2678	
	water	TM	MH25B1	
MH25B1	water (filterd)	DM	MH2679	
	soil	TM	MH2680	
	water	TM	MH25B2	
MH25B2	water (filterd)	DM	MH2681	
	soil	TM	MH2682	
	water	TM	MH25B3	
MH25B3	water (filterd)	DM	MH2683	
	soil	TM	MH2684	
MH25B4	water	TM	MH25B4	
MILESOA	water (filterd)	DM	MH2685	
	water	TM	MH25B5	
MH25B5	water (filterd)	DM	MH2686	
	soil	TM	MH2687	
	water	TM	MH25B6	
MH25B6	water (filterd)	DM	MH2688	
	soil	TM	MH2689	
	water	TM	MH25B7	
MH25B7	water (filterd)	DM	MH2690	
	soil	TM	MH2691	

..-

•

			
	water	TM	MH25B8
MH25B8	water (filterd)	DM	MH2692
<u> </u>	soil	TM	MH2693
}	water	TM	MH25C0
MH25C0	water (filterd)	DM	MH2694
	soil	ТМ	MH9695
MH25C4	water	TM	MH25C4
	water (filterd)	DM	MH2696
	water	TM	MH25C5
MH25C5	water (filterd)	DM	MH2697
) 	soil	TM	MH2698
_ 	water	TM	MH25C7
MH25C7	water (filterd)	DM	MH2699
	soil	TM	MH26A0
	water	TM	MH25C8
MH25C8	water (filterd)	DM	MH26A1
	soll	TM	MH26A2
MH25C9	water	TM .	MH25C9
Will IAJC3	water (filterd)	DM	MH26A3
	water	TM	MH25D1
MH25D1	water (filterd)	DM	MH26A4
	soil	TM	MH26A5
MUJEDO	water	TM	MH25D3
MH25D3	water (filterd)	DM	MH26A6
	water	TM	MH25D4
MH25D4	water (filterd)	DM	MH26A7
	soil	TM	MH26A8
	water	TM	MH25D5
MH25D5	water (filterd)	DM	MH26A9
	soil	TM	MH26B0
MH25D6	water	TM	MH25D6
סטכאחואון	water (filterd)	DM	MH26B1
	water	TM	MH25D7
MH25D7	water (filterd)	DM	MH26B2
	soil	TM	MH26B3
MH25D8	water	TM	MH25D8
マンドラング	water (filterd)	DM	MH25B4
MUZEDO	water	TM	MH25D9
MH25D9	water (filterd)	DM	MH26B5
MUSEEN	water	TM	MH25E0
MH25E0	water (filterd)	DM	MH26B6
MUDEE4	water	TM	MH25E1
MH25E1	water (filterd)	DM	MH26B7
MUSECS	water	TM	MH25E2
MH25E2	water (filterd)	DM	MH26B8
MUSEES	water	TM	MH25E3
MH25E3	water (filterd)	DM	MH26B9

	water	TM	MH25E4
MH25E4	water (filterd)	DM	MH26C0
	soil	TM	MH26C1
	water	TM	MH25E5
MH25E5	water (filterd)	DM	MH26C2
	soil	TM	MH26C3
	water	TM	MH25E6
MH25E6	water (filterd)	DM	MH26C4
	soil	TM	MH26C5
	water	TM	MH25E7
MH25E7	water (filterd)	DM .	MH26C6
·	soil	TM	MH26C7
	water	TM	MH25E8
MH25E8	water (filterd)	DM	MH26C8
	soil	TM	MH26C9
MH25E9	water	TM	MH25E9
IVITADES	water (filterd)	DM	MH26D0
MH25F0	water	TM	MH25F0
MH25FU	water (filterd)	DM	MH26D1

Edwards, Meredith D.

From: Olson, Roxanne

Sent: Friday, June 20, 2008 9:54 AM

To: Edwards, Meredith D.

Subject: FW: Region 08 |Case 37402 | Lab DATAC | Issue Insufficient volume | FINAL

From: Kramer, Caroline [mailto:ckramer5@fedcsc.com]

Sent: Friday, June 20, 2008 9:46 AM

To: Olson, Roxanne **Cc:** beard.carol@epa.gov

Subject: Region 08 | Case 37402 | Lab DATAC | Issue Insufficient volume | FINAL

Roxy,

Summary Start

Issue: There were no samples designated on the TR/COC for laboratory QC and lab QC is required per scheduling. The laboratory is unable to perform a reduced volume QC on the waters as the samplers delivered the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. Below is a list of the SDG for Case 37402 and the laboratory has indicated which SDG will not have sufficient volume for QC, and where possible selected a sample they would like to use for QC.

MH2599 (TM water) no QC selected as there is not enough volume.

MH25C5 (TM water) no QC selected as there is not enough volume.

MH25E8 (TM water) no QC selected as there is not enough volume.

MH2662 (DM water) no QC selected as there is not enough volume.

MH2697 (DM water) no QC selected as there is not enough volume.

MH26C8 (DM water) no OC selected as there is not enough volume.

MH25F1 (TM soil) selected MH26C9 for QC.

MH2663 (TM soil) selected MH2695 for QC

Resolution: Per Region 8, the laboratory's selection of soil QC samples is acceptable. The laboratory will note the volume insufficiency in the SDG Narrative, cancel lab QC on the TM and DM SDG and proceed with the analysis of the samples.

Summary End

Please let me know if you have any questions or problems. Thank you,

Caroline L. Kramer
ckramer5@fedcsc.com
Computer Sciences Corporation (CSC)
703.818.4248

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→ 6/20/2008 Phone conversation between Caroline Kramer, SMO, and Carol Beard, Region 8. Carol confirmed that the soil samples selected for QC are acceptable and that DATAC can cancel the QC for the water samples due to insufficient sample volume. The laboratory will note the issue in the SDG Narrative.

From: Kramer, Caroline

Sent: Thursday, June 19, 2008 3:21 PM

To: 'beard.carol@epa.gov'

Subject: Region 08 | Case 37402 | Lab DATAC | Issue Insufficient volume

Carol.

DATAC is reporting the following issue regarding Case 37402. Please advise on how the Region wishes the laboratory to proceed.

Issue: There were no samples designated on the TR/COC for laboratory QC and lab QC is required per scheduling. The laboratory is unable to perform a reduced volume QC on the waters as the samplers delivered the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. Below is a list of the SDG for Case 37402 and the laboratory has indicated which SDG will not have sufficient volume for QC, and where possible selected a sample they would like to use for QC.

MH2599 (TM water) no QC selected as there is not enough volume. MH25C5 (TM water) no QC selected as there is not enough volume. MH25E8 (TM water) no QC selected as there is not enough volume. MH2662 (DM water) no QC selected as there is not enough volume. MH2697 (DM water) no QC selected as there is not enough volume. MH26C8 (DM water) no QC selected as there is not enough volume. MH25F1 (TM soil) selected MH26C9 for QC. MH2663 (TM soil) selected MH2695 for QC

Please let me know if you have any questions or problems. Thank you,

Caroline L. Kramer ckramer5@fedcsc.com Computer Sciences Corporation (CSC) 703.818.4248

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From: Olson, Roxanne [mailto:olsonr@datachem.com]

Sent: Thursday, June 19, 2008 3:04 PM

To: Kramer, Caroline

Subject: FW: Region 8 Case 37402

Caroline: See the following for the SDGs and where possible DATAC's selection for QC. Please note that because this was a confusing login effort we have one SDG (MH2663) that we did not use the lowest alpha numeric number to name the SDG.

Roxy

From: Edwards, Meredith D.

Sent: Thursday, June 19, 2008 12:57 PM

To: DataChem EPA List

Subject: Region 8 Case 37402

Here are the SDG names and then the samples I chose for QC.

MH2599 TM water no QC selected as there is not enough volume.

MH25C5 TM water no QC selected as there is not enough volume.

MH25E8 TM water no QC selected as there is not enough volume.

MH2662 DM water no QC selected as there is not enough volume.

MH2697 DM water no QC selected as there is not enough volume.

MH26C8 DM water no QC selected as there is not enough volume.

MH25F1 TM soil selected MH26C9 for QC.

MH2663 TM soil selected MH2695 for QC also on this SDG I used a higher number to name the SDG. Since there were only 2 samples that didn't change names after receipt it was very confusing.

Thanks

Mere

----Original Message-----From: Kramer, Caroline

Sent: Thursday, June 19, 2008 10:47 AM

To: 'Olson, Roxanne'

Subject: RE: Region 08 | Case 37402 | Lab DATAC | Issue Multiple | FINAL

Roxy,

Just let me know as soon as you know which SDG will not have sufficient volume and I will pass it along to the Region for a resolution.

Please let me know if you have any confusion with the spreadsheet of new sample IDs as you are logging them in. Thanks.

Caroline L. Kramer ckramer5@fedcsc.com Computer Sciences Corporation (CSC) 703.818.4248

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----Original Message-----

From: Olson, Roxanne [mailto:olsonr@datachem.com]

Sent: Thursday, June 19, 2008 10:38 AM

To: Kramer, Caroline

Subject: FW: Region 08 | Case 37402 | Lab DATAC | Issue Multiple | FINAL

Caroline: Another issue with the samples from yesterday as we were logging them in. We have no extra volume for the water samples for QC. Is the case closed or should we expect additional volume from another delivery? We can't even do a reduced volume on the waters as the samplers are delivering the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. I will let you know which SDGs will not have QC as soon as we complete the login.

Roxy

USEPA - CLP COVER PAGE

Lab Name: DataChem Laboratories	Co	ntract: EP-	-W-06-054	
		·		
Lab Code: <u>DATAC</u> Case No.: <u>37402</u>	NRAS No.:	<u>1554.1</u>	SDG No.:	MH2697
SOW No.: ILM05.4				
IDA Comple No	•*	T a la	Comple ID	
EPA Sample No.	• •		Sample ID	
MH2697			027001	
MH2699 MH26A1			027002 027003	
MH26A3			027003	
MH26A4			027005	
MH26A6			027006	
MH26A7			027007	•
MH26A9		8171	027008	,
MH26B1		8171	0,2700,9	
MH26B2			027010	
MH26B4			027011	
MH26B5			027012	
<u>МН26В6</u> мн26В7			027013 027014	
MH26B7 MH26B8			027015	
MH26B9			027016	
MH26C0			027017	
MH26C2	•		027018	•
MH26C4		8171	027019	
MH26C6		8171	027020	
			ICP-AES	ICP-MS
Were ICP-AES and ICP-MS Interelement corrections applied?		(Yes/No)	ICP-AES	ICP-MS <u>YES</u>
		(Yes/No)		
corrections applied? Were ICP-AES and ICP-MS background c	orrections before	,	<u>NO</u>	YES
corrections applied? Were ICP-AES and ICP-MS background capplied? If yes - were raw data generated application of background correct	orrections before	(Yes/No)	<u>NO</u>	YES NO
corrections applied? Were ICP-AES and ICP-MS background capplied? If yes - were raw data generated	orrections before	(Yes/No)	<u>NO</u>	YES NO
corrections applied? Were ICP-AES and ICP-MS background capplied? If yes - were raw data generated application of background correct	orrections before	(Yes/No)	<u>NO</u>	YES NO
corrections applied? Were ICP-AES and ICP-MS background capplied? If yes - were raw data generated application of background correct	orrections before	(Yes/No)	<u>NO</u>	YES NO
corrections applied? Were ICP-AES and ICP-MS background capplied? If yes - were raw data generated application of background correct	orrections before ions? in compliant hnically and Release of puter-readate onic transmonic transmon	(Yes/No) (Yes/No) ace with the differ composite data shission, if Manager of	NO NO NO NO NO ne terms a pleteness, contained submitted approved	NO NO nd for other in this on diskette in advance
Corrections applied? Were ICP-AES and ICP-MS background capplied? If yes - were raw data generated application of background correct Comments: I certify that this data package is conditions of the contract, both technique than the conditions detailed above. hardcopy data package and in the com (or via an alternate means of electric by USEPA) has been authorized by the	orrections before ions? in compliant hnically and Release of puter-readate onic transmonic transmon	(Yes/No) (Yes/No) ace with the difference composite data shission, if Manager composite.	NO NO NO NO NO ne terms a pleteness, contained submitted approved	NO NO nd for other in this on diskette in advance



SDG NARRATIVE

Case #: 37402 SDG#: MH2697

Contract #: EP-W-06-054 DCL Set ID#: 8171027 Modification#: 1554.1

July 14, 2008

General Information

The twenty samples in this SDG were analyzed by methodologies contained in ILM05.4. All concentration, analytical, and method qualifiers are defined in the SOW.

Holding Times

The samples were prepared and analyzed within method required holding times.

Initial and Continuing Calibration

All initial and continuing calibration verification and blank analyses were performed within the designated frequency and recoveries of the verifications and concentrations of the blanks met method acceptance criteria.

ICP-MS Interference Check Sample Analysis

Results for the interference check samples met method acceptance criteria.

Preparation Blanks

The absolute values of all analyte concentrations in the preparation blanks were lower than the Contract Required Quantitation Limits.

Laboratory Control Sample Analysis

Results for the analysis of the water LCS met method acceptance criteria.

Matrix Spike Analysis

A matrix spike was not prepared or analyzed due to insufficient sample volume.

Matrix Duplicate Analysis

A matrix duplicate was not prepared or analyzed due to insufficient sample volume.

ICP-MS Serial Dilution

ICP-MS Serial Dilutions results met method acceptance criteria with the exceptions of antimony and nickel.

Miscellaneous Comments

All calibration data is linear, please see raw data.

Cooler Temps were at 4 °C.

Issue: Samples were received with the same sample ID for TM and DM. New CLP sample IDs were received for the DM analysis.

Issue: Insufficient sample volumes were received to prepare or analyze matrix spike and matrix spike duplicate samples.

Example Equations

Method HW3:
$$C \times \frac{Vf}{Vi} \times DF = Concentration(\mu g/L)$$

 $C=Instrument\ value\ in\ \mu g/L$ (The average of all replicate integrations). Vf= Final digestion volume (mL)

Vi = Initial digestion volume (mL)

DF = Dilution Factor

UM					Mush	1984.1		
.ab Name DataC	Chem Laboratori	es, inc.				•	Page	1 or 4
Received By (Print Name	III ALIN	Edward	lc				Log-in Date	0/19/08
Received By (Signature)	More duf	Selv	ard					
Case Number 374	12				Sample Delivery Group No.	14209	NRAS Numb	ria
Remarks:	Remarks: Aque					nding	R	emarks: on of Sample
			Sample #	Sample pH	Sample Tag #	Assigned Lab #	Ship	oment, etc.
1. Custody Seal (s)	Present/Abaent*	Mt L	5A7	12	<u>nla</u>		1111	mojer
	Intact/Broken*		Ag					
2. Custody Seal Nos.			Bo		·			_
			В					
3. TrafficReports/ Chain of Custody Records or/Packing Lists	Present/Absent*		ρţ				• .	·
4. Airbill	Airbill/Sticker Present/Absent*		b 5					
			Ø\$.		·			
5. Airbill No.	n)a_		09			<u> </u>		
/	<u> </u>		ES					
6. Sample Tags	Present/Altsent		FI	Na			Metals	Soil
Sample Tag Numbers	Listed on Chain-of-Custody	Mt ?	103	12			DA	under
7. Sample Condition	intard/Broken*/ Leaking*		75					
8, Cooler Temperature Indicator Bottle	Present/Absent*		77					
9. Cooler Temperature	4.		79					·
10. Does information on custody records, traffic reports, and sample tags agree?	Garl No.		85					`
11.Date Received at lab	80/8/10	!	810					
12. Time Received	- 815		92					! <u>-</u>
Sample Transfer		,	B 5			817/027612		
Fraction DA	Fraction		CS		1			
Area # (7. 22)	Area # 40				Ale while			
By My	By XX			<u> </u>	tita			
On UIS OF	On h.record of resolution	<u> </u>		1	<u></u>			
Reviewed By	Down	21-1	Also		Logbook No. NOT APPLICA	BLE		
Date:	1/1	2/AN			Logbook Page No. NOT API	PLICABLE		

con					,	Mod 1	584.1			
Lab Name DataC	Chem Laboratori	es, inc.					•	Page	1 of 1	
Received By (Print Name	e' Mere duth	Elward	C					Log-in Date	4/19/03	
Received By (Signature)	Meredih		n	·	`					
Case Number 2 20	21 422 1224	NE HOUSE			Sample Del	ivery Group No.	HZIAZ	NRAS Num	nber N Iw	
Remarks:		E1	PA Sample #	Aqueous		Carrespoi		Remarks: Condition of Sample		
ļ.				pH	Sa	mple Tag.#	Assigned Lab #		ipment, etc.	
1. Custody Seal (s)	Present/Absent*	WH	1599	12	 	Ma		IM	Wher	
	intacveroken"		AO			1				
2. Custody Seal Nos.	_n_		A2			<u> </u>				
			A3		ļ	<u> </u>		1	<u></u>	
3. TrafficReports/ Chain of Custody Records or Packing	_		0.			t e			; ;- p	
Lists	Present/Absent*		B2	++-		<u> </u>	1			
4. Airbill	Airbill/Sticker Present/AliseRt*		B3					<u> </u>		
	,		Blo	 - - 				 		
5. Airbill No.	<u> </u>		E	11-		<u> </u>				
		1	£2_	11_	<u>'</u>				<u> </u>	
6. Sample Tags	Present/Absent*	MH	2642					Din	Mku	
Sample Tag Numbers	Listed/Not Listed on Chain-of-Cuatody		<u>u4</u>							
7. Sample Condition	iniaa/Broken*/ Leaking*		(0)							
8. Cooler Temperature Indicator Bottle	Present/Aldserit*	,	70							
9. Cooler Temperature	4.		81				; ;			
10. Does information on custody records,										
traffic reports, and sample tage agree?	Y@No*		1 13					 		
11.Date Received at lab	ule by		88							
12. Time Received	-815	í 	67	 	ļ	ļ.	817102704	 	;	
Sample Transfer , Fraction	Fraction		1 31	┼			1 015	-	<u> </u>	
Mon	Au	 		-	Ale	4/18/18		 	· · · · · · · · · · · · · · · · · · ·	
Area # P.33	Area #					alix18		_		
On Market	By On			 				-		
* Contact SMO and attac	<u> </u>			<u> </u>			L			
Reviewed By	t delans	<i>(</i>) .	Olsa		Logbook No	. NOT APPLICA	BLE			
Date:	6/19	2/4	D D		Logbook Pa	ige No. NOT API	PLICABLE	• .	3	
<u> </u>	6/19	100	r 		1					

turge upola mod 1554.1 CORU Lab Name DataChem Laboratories, Inc. Page Received By (Print Name) Log-In Date Received By (Signature) Case Number Sample Delivery Group No. **NRAS Number** 37402 my 2197 na Remarks: Aqueous Remarks: Corresponding EPA Sample:# Sample Condition of Sample рH Assigned Lab # Shipment, etc. Sample Tag # 62 Mr water MA Present/Absent 1. Custody Seal (s) Intact/Broken* 2. Custody Seal Nos. 3. TrafficReports/ Chain of Custody Records or Packing Present/Absent Lists 4. Airbili 11/2/072 DM weer 5. Airbill No. 8/7/07/08 A9 131 014 Present/Absent 6. Sample Tags idsted/Not Listed on Chain-of-Custody Sample Tag Numbers 010 intact/Broken*/ Leaking* 01/ 7. Sample Condition 8. Cooler Temperature Present/At/sent 013 BU Indicator Bottle OW 9. Cooler Temperature 10. Does information on custody records, traffic reports, and sample tags agree? 11.Date Received at lab 12. Time Received Sample Transfer Fraction Fraction Area # Ву On * Contact SMO and attach record of resolution Logbook No. NOT APPLICABLE Reviewed By Date: Logbook Page No. NOT APPLICABLE

Grow				WIT L	e Lu	IGAN SHE	Mod 1554	t.1			
ab Name DataC	hem Laboratori	es, Inc.							,	Page	of _
Received By (Print Name	MULLIUM	Edun	<u>U</u>		·					Log-In Date	4/19/04
Received By (Signature)	AULONOA II 💝.	brank									<u> </u>
Case Number 3H02	· · · · · · · · · · · · · · · · · · ·			. —		Sample:Deliv	ery Group No.	W+ 21	197	NRAS Numb	er WA
Remarks:		EP	A Sample #		wbje neons		Correspon		· ·		emarks: on of Sample
					ρH	Sam	pie Tag #	Assigned Lab #		Ship	ment, etc.
1. Custody Seal (s)	Present/Atisent*	M+2		4	2	NE				<u></u>	woter
			<u>B7</u>	_				1			
2. Custody:Seal Nos.	-MA		<u> </u>	_	ļ			-		-	<u> </u>
		<u> </u>	13								
TrafficReports/ Chain of Custody Records or Packing Lists	Present/Absent*		DH					į			
4. Airbill	Airbill/Sticker Present/Absext*		ES]. }					i i
4. Alium	Present/Ausent		Ele						· · · · · ·		
5. Airbill No.	1/2	MH	2690							Ton	h user
			97					8171	02700/		
6. Sample Tags	Present/Absent	;	Me	Trans			,		Liste		
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody		AA				,		OP	Grand.	
7. Sample Condition	Intact/Broken*/ Leaking*		C2						OIK		. 1
8. Cooler Temperature Indicator Bottle	Present/Absept*		CY				l,		Ulq		
9. Cooler Temperature	4	<u> </u>					<u> </u>			<u>}</u>	·
10. Does information on custody records, traffic reports, and sample tags agree?	(Yah/No*	: ·							÷		
11.Date Received at lab	6/18/18					Su		:			
12. Time Received	<u>8:16</u>						May			,	:
Sample Transfer										·	
Ju DM	Fraction		·			 			_		
Area # P.36.1	Area # X		·								
By Ale	By No.										
Contact SMO and attac	<u> </u>			<u> </u>				[<u> </u>	
Raviewed By	alen	ze) (Plan			Logback No.	NOT APPLICA	3LE			
Date:	4/19	108				Logbook Page	e No. NOT APP	LICABLE		:	,

Cory		·				Mod	1554.1			
Lab Name DataC	hem Laboratori	es, inc.	,	,					Page	_ of
Received By (Print Name	" Meredith	Eduar	ds.						Log-In Date /	19/08
Received By (Signature)	Merudel	Lede	wel							<u> </u>
Case Number 37407					Sample Delive	ry Group No.	httera.	ļ	NRAS Number	ala
Remarks: EPA Sample #				Aqueous Sample	Carresponding				Remarks: Condition of Sample	
				pH	Sam	Sample Tag #			Shipment, etc.	
1. Custody Seal (s)	Present/Absent	MH	25 Co	42	1	<u>L</u>	<u> </u>		Tm	water
	Intact/Broken*		<u>ou</u>		1		<u> </u>			
2. Custody Seal Nos.	Na_		C7				<u></u>	<u>.</u>		
			C8							
3. TrafficReports/ Chain of Custody Records or Packing	P/ssent/Absent*		CA							
Lists	Airbill/Sticker		· · · · ·					 		
4. Airbill	Present/Absent*									! !
,	į		<i>E3</i>			 	 			
5. Airbill No.			1 24			1			,	
			E9				<u> </u>			
6. Sample Tags	Present/Absent*		FO	_			 			
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody	mt	12494			1			D1	n unter
7. Sample Condition	(gtact/Broken*/ Leaking*		96		j					,
8. Cooler Temperature indicator Sottle	Present/Absent*		old				8/7/07	7002		:
9. Cooler Temperature	4		Al			<u> </u>		WB	·	
10. Does information on custody records, traffic reports; and sample tags agree?	Kenno*		A3					שא	4	
11.Date Received at lab	ulista		Pal					2005		
12. Time Received	815		139	,				NY		
Sample Transfer			w					017	i.	
Fraction TM TDM	Fraction		100		<u> </u>					
Area # 7 .331	Area # Vic	·				1				
By Alt	Ву .					Mr	18/18			
* Contact SMO and attac	On promise resolution				L.,					
Reviewed By	ollen	re	Olso.	<u> </u>	Logbook No.	NOT APPLICA	ALE			
Date:	(-1	19/	5.P		Logbook Page	No. NOT AP	PLICABLE			

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME	DataChem Laboratorie	es, Inc.			
CITY/STATE	Salt Lake City, UT	84123			
CASE NO.	37402	SDG NO.:		MH2697	
SDG NOs. TO FOLLOW	N/A				
NRAS No.	N/A				
CONTRACT NO.	EP-W-06-054	,			ì
SOW NO.	ILM05.4		1		

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - Exhibit B Section 2.6)

			PAGI	E NOs	Сн	ECK
			FROM	TO	LAB	REGION
1.	Cover Page		(1	✓	
2.	SDG Narrative	,	- - - - - -	3	✓	
3.	Sample Log-In Sheet (DC-1)		4	8	✓	
4.	Inventory Sheet (DC-2)		9	10	· 1	
5	Traffic Report/Chain of Custody Record(s)		$\neg t$	13	─ ✓	
	Inorganic Analysis					
6.	Data Sheet (Form I-IN)		14	33	✓	•
7.	Initial & Continuing Calibration		<u> </u>	2/		
	Verification (Form IIA-IN)		34	36	_	
8.	CRQL Standard		22	38	,	•
	(Form IIB-IN)		34	17/5	· · ·	
9. 10.	Blanks (Form III-IN) ICP-AES Interference Check Sample		21_	<u> 90</u>		
10.	(Form IVA-IN)		NA		✓	
11.	ICP-MS Interference Check Sample		111	1		
	(Form IVB-IN)		41	4)	✓	
12.	Matrix Spike Sample Recovery					
	(Form VA-IN)		Mt		✓	
13.	Post-Digestion Spike Sample Recovery					
	(Form VB-IN)				✓	
14.	Duplicates (Form VI-IN)		V		✓	
15.	Laboratory Control Sample			10		
	(Form VII-IN)		42	42	√	
16.	ICP-AES and ICP-MS Serial Dilutions		102	112	,	
17	(Form VIII-IN)		45	<u> </u>		
17.	Method Detection Limits (Annually) (Form IX-IN)		44	45	✓	
18.	ICP-AES Interelement Correction Factors		1.0			
	(Quarterly) Form XA-IN)		NA			
19.	ICP-AES Interelement Correction Factors		1			
20.	(Quarterly) Form XB-IN) ICP-AES and ICP-MS Linear Ranges		<u> </u>			
20.	(Quarterly) Form XI-IN)		410	46	J	
21.	Preparation Log (Form XII-IN)		43	<u> </u>		
	· · · · · · · · · · · · · · · · · · ·					

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs	CHECK
	FROM TO	LAB REGION
22. Analysis Run Log (Form XIII-IN)	48 49	
23. ICP-MS Tune (Form XIV-IN)	<u>50 50</u>	
24. ICP-MS Internal Standards Relative	57 570	
Intensity Summary (Form XV-IN) 25. ICP AES Raw Data	KUA -	<u> </u>
26. GFAA Raw Data (If Applicable)	AUA	<u> </u>
27. ICP-MS Raw Data (II Applicable)	57 197	
28. Mercury Raw Dta	37	
29. Cyanide Raw Data	KIA —	
30. Preparation Logs Raw Data	193 102	
31. Percent Solids Determination Log	100	
32. USEPA Shipping/Receiving Documents	1114	
Airbill (No. of Shipments)	194 194	✓
Sample Tags	tak tak	
Sample Log-In Sheet (Lab)	NA (13	
33. Misc. Shipping/Receiving Records	NA .	
(list all individual records)		
Telephone Logs	X (V)	✓
DCL CRIR	NA NA	
DCL SDG TR Cover Sheet	196 196	
34. Internal Lab Sample Transfer Records and	110 110	
Tracking Sheets (describe or list)		•
DCL Work Order	MA	✓
DCL COC	192 198	
35. Internal Original Sample Prep &		<u> </u>
Analysis Records (describe or list)		
Prep Records	199 205	√
Analysis Records	206 228	
Description	NA NA	
36. Other Records (describe or list)		
Telephone Communications Log	NA	✓
E-mail Communications	729 738	
		<u> </u>
37. Comments:		
		_
Completed by: (CLP Lab) Conulu	Julie Warath / Doc. Ctrl.	7/14/08
(Signature)	(Print Name & Title)	(Date)
Audited By:		
(USEPA)		
(Signature)	(Print Name & Title)	(Date)

&EPA			t Laboratory I ic Report & C	hain of Custody	Recor. B17	 	Case No: DAS No: SDG No:	37402 142097	L
Date Shipped: Carrier Name: Airbill: Shipped to:	6/16/2008 Hand delivered Datachem Laborate Inc. 960 West LeVoy Di Salt Lake City UT 8 (801) 266-7700	rive	Chain of Custod Relinguished By 1 2 3		Sampler Signature Received By Murch tolky	(Date / Time)	For Lab Us Lab Contract N Unit Price: Transfer To: Lab Contract N Unit Price:	to: EMM	o loost nh Ar lethyw
INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC! TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLL DATE/TIM	•	RGANIC VIPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
MH25C5	Surface Water/ Sediment	/G	DM (21), TM (21)	91, 92, 93 (3)	Silver Creek upstream of Dority Springs	S: 6/5/2008	10:20		
	Carrier			**************************************	Constant Constant				· \.
MH25C7	Surface Water/ Sediment	/G	DM (21), TM (21)	97, 98, 99 (3)	Silver Creek above Prospector Square	S: 6/5/2008	10:50		M.
MH25C8	Surface Water/ Sediment	/G	DM (21), TM (21)	100, 101, 102 (3)	Silver Creek downstream of Ontario Canyon	S: 6/5/2008	12:55		
MH25C9	Surface Water	/G	DM (21), TM (21)	1 03;104, 105 (3) (2)	Silver Creek above Ontario Canyon	S: 6/5/2008	13:20		**************************************
MUSEDO	Santamillates	-	<u>(211 (24), 710 (24)</u>	-100, 100, 100, (8)	Other Carries				
MH25D1	Surface Water/ Sediment	/G	DM (21), TM (21)	109, 110, 111 (3)	Ontario Canyon below Ontario Drain Tunnel 2	S: 6/5/2008	14:50		\
	Control	(A)	DM (04) TM (24)	112,110,111(8)					·

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 44444	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	1111	Custody Seal Intact? Shipment lced?
DM = CLP TAL Dissolve	d Metals TM = CLP TAL Total Metals			

Ontario Canyon above

Empire Canyon

Mouth of Empire

Canyon

S: 6/5/2008

S: 6/5/2008

14:00

15:00

TR Number: 8-584325316-061608-0001

Surface Water

Surface Water/

Schiment

/G

/G

DM (21), TM (21)

MH25D3

MH25D4

LABORATORY COPY

DM (21), TM (21) 118, 119, 120 (3)

SEPA	
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USEPA Contract Laboratory Program Inorganic Traffic Report & Chain of Custody Record MARK ISSY. Case No:

37402

DAS No: SDG No:

Date S	hipped:
Carrie	Name:

6/16/2008

Hand delivered

Sampler **Chain of Custody Record** Signature: Relinquished By

For Lab Use Only

Airbiil:

Shipped to:

Datachem Laboratories,

960 West LeVoy Drive Salt Lake City UT 84123 (801) 266-7700

3

4

Received By (Date / Time)

(Date / Time) Lab Contract No:

Unit Price:

Transfer To:

Lab Contract No:

Unit Price:

								47 March 1984		
,	INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSISI TURNAROUND	TAG No.J PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COL DATE/TIM		ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
-	MH25D5	Surface Water/ Schiment	/G	DM (21), TM (21)	121, 122, 123 (3)	Mouth of Walker & Webster Gulch	S: 6/6/2008	11:00		
	MH25D6	Surface Water	/G	DM (21), TM (21)	[24:125:128(3) (で)	Mouth of Anchor Tunnel	S: 6/6/2008	9:50	•	
	MH25D7	Surface Water/	/G	DM (21), TM (21)	127, 128, 129 (3)	Upstream of Anchor Tunnel	S: 6/6/2008	10:30		
	MH25D8	Ground Water	/G	DM (21), TM (21)	130, 131 (2)	Transact 1	S: 6/4/2008	18:55		
	MH25D9	Ground Water	/G	DM (21), TM (21)	132, 133 (2)	Transect 2	S: 6/4/2008	17:43		A CONTRACTOR OF THE CONTRACTOR
	MH25E0	Ground Water	/G	DM (21), TM (21)	134, 135 (2)	Transect 3	S: 6/4/2008	17:08		\
	MH25E1	Ground Water	/G	DM (21), TM (21)	136, 137 (2)	Transect 5	S: 6/3/2008	15:00		
	MH25E2	Ground Water	/G	DM (21), TM (21)	138, 139 (2)	Transect 6	S: 6/3/2008	12:55		•
:	MH25E3	Ground Water	/G	DM (21), TM (21)	140, 141 (2)	P2-5	S: 6/3/2008	10:57		
	MH25E4	Surface Water/	/G	DM (21), TM (21)	142, 143, 144 (3)	SC-SW-33	S: 6/5/2008	10:54		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:		Cooler Température Upon Récelpt: 4444444	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? N. Shipment lead?
DM = CI P TAL Dissolve	od Metals TM = CLP TAL Total Metals			

TR Number:

8-584325316-061608-0001

LABORATORY COP

	&EPA	USEPA Contrac Inorganic Trafi	· ·	_	Record	417	Case No: DAS No: SDG No:	37402 UoAA	L
V	Date Shipped: Carrier Name:	6/16/2008 Hand delivered	Chain of Custody		Sampler Signature:	Arg	For Lab Use Or	· ^ (
	Airbill:	I with contact	Relinquished By	(Date / Time)	Received By	(Date / Time)	Lab Contract No:	EMADIOSY	<u> </u>
	Shipped to:	Datachem Laboratories, Inc.	1 Char #7	6/18/08	Mered Ordin	il wholes	Unit Price:	- Mr	·
		960 West LeVoy Drive	2	,			Transfer To:	- Ak H	
		Salt Lake City UT 84123 (801) 266-7700	3	-			Lab Contract No:	AIRTOR	
		1,	4	***	1		Ünit Price:		

				<u> 1</u>	<u> </u>	1	CHREEN	.e.	
INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCÁTION	SAMPLE CO DATE/TII		ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
MH25E5	Surface Water/ Sediment	/G	DM (21), TM (21)	145, 146, 147 (3)	SC-SW-40-1	S: 6/5/2008	14:30		
MH25E6	Surface Water/ Sediment	/G	DM (21), TM (21)	148, 149, 150 (3)	SC-SW-40-1	S: 6/5/2008	14:37		Mr.
MH25E7	Surface Water/	/G	ĎM (21), TM (21)	151, 152, 153 (3)	SC-SW-43	S: 6/6/2008	10:34		MI MAN
MH25E8	Surface Water/	/G	DM (21), TM (21)	154, 155, 156 (3)	SC-SW-44	S: 6/5/2008	18:45		
MH25E9	Surface Water	/G	DM (21), TM (21)	157, 158, 150 (3) (2)	SC-SW-OPP1	S: 6/5/2008	8:07		
MH25F0	Surface Water	/G	DM (21), TM (21)	1 60, 101, 162 (3) (っ)	SC-SW-OPP2	S: 6/5/2008	15:40		
MHZ5F1	Sediment		TM(2	n (i)	5(-54-20				

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:		Cooler Temperature Upon Receipt: 44449	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? 1 Shipment Iced? 1
DM = CLP TAL Dissolve	d Metals, TM = CLP TAL Total Metals		·-·	

TR Number:

TARGET SHEET

EPA REGION VIII

SUPERFUND DOCUMENT MANAGEMENT SYSTEM

DOCUMENT NUMBER: 1085986 **RICHARDSON FLAT TAILINGS** SITE NAME: __ DOCUMENT DATE: 09/11/2008 DOCUMENT NOT SCANNED Due to one of the following reasons: □ PHOTOGRAPHS ☐ 3-DIMENSIONAL □ OVERSIZED ☐ AUDIO/VISUAL □ PERMANENTLY BOUND DOCUMENTS □ POOR LEGIBILITY ☑ OTHER □ NOT AVAILABLE ☐ TYPES OF DOCUMENTS NOT TO BE SCANNED (Data Packages, Data Validation, Sampling Data, CBI, Chain of Custody) **DOCUMENT DESCRIPTION:** 1 - 3 1/2" Floppy - File Name MH2697.IO1, Contract #EP-W-06-054, Case/SDG 37402/MH2697, 7/14/08